



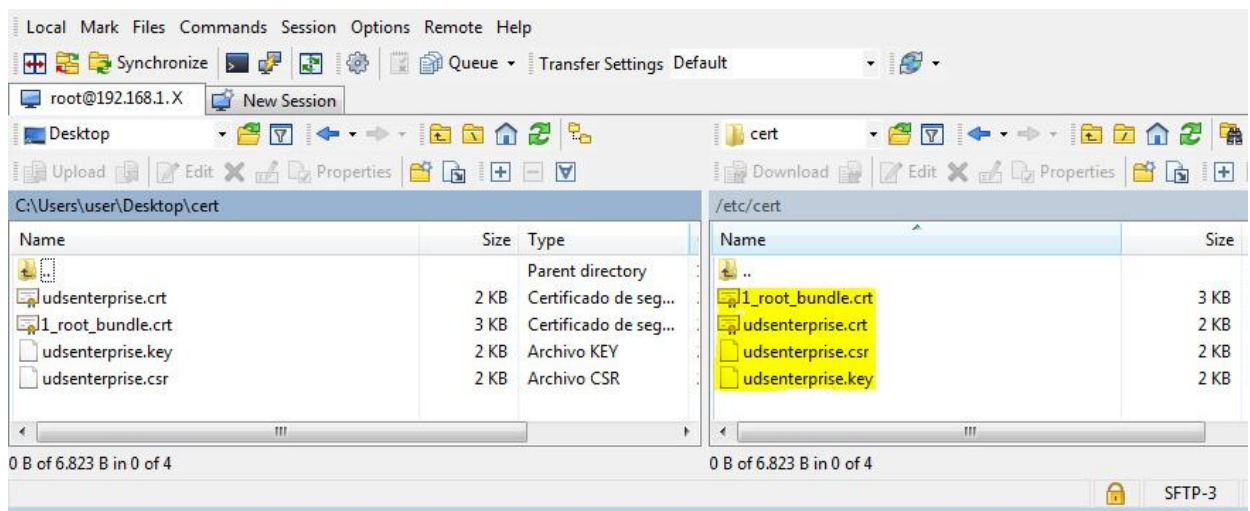
Install SSL Certificates on UDS Servers

SSL certificates must be installed on both, UDS server and UDS Tunneler server (if the latter is available).

Certificates must be generated for PEM format. If they are generated through a certificate authority, you must also have your certificate file (*.**cert** or *.**pem**). You will also need the "Key file" (*.**key**).

Steps for installing certificates on UDS Server

1. Obtain the Certificates and upload them (for example with WinSCP) to the UDS server, in the following path: **/etc/cert** (it will be necessary to create the folder: cert).



2. Access UDS Server console:

```
UDS Enterprise 2.0.0
Hint: Num Lock on

udsserver login: root
Password:
Last login: Tue Oct 4 12:20:36 CEST 2016 on tty1
Linux udsserver 3.16.0-4-amd64 #1 SMP Debian 3.16.36-1+deb8u1 (2016-09-03) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
root@udsserver:~#
```



3. Edit the file: `/etc/apache2/sites-enabled/default-ssl.conf`

```
root@udsserver:~# nano /etc/apache2/sites-enabled/default-ssl.conf_
```

4. Edit the lines **SSLCertificateFile** and **SSLCertificateKeyFile**

```
# A self-signed (snakeoil) certificate can be created by installing
# the ssl-cert package. See
# /usr/share/doc/apache2.2-common/README.Debian.gz for more info.
# If both key and certificate are stored in the same file, only the
# SSLCertificateFile directive is needed.
SSLCertificateFile /etc/ssl/certs/ssl-cert-snakeoil.pem
SSLCertificateKeyFile /etc/ssl/private/ssl-cert-snakeoil.key
```

5. Setup new certificates and their path

- a. Add **SSLCertificateFile**: `/etc/cert/udsenterprise.crt` (certificate example)
- b. Add **SSLCertificateKeyFile**: `/etc/cert/udsenterprise.key` (certificate example)

```
# A self-signed (snakeoil) certificate can be created by installing
# the ssl-cert package. See
# /usr/share/doc/apache2.2-common/README.Debian.gz for more info.
# If both key and certificate are stored in the same file, only the
# SSLCertificateFile directive is needed.
SSLCertificateFile /etc/cert/udsenterprise.crt
SSLCertificateKeyFile /etc/cert/udsenterprise.key
```

6. If you have a certificate from some certificate authority, you will have to set it up in the line: **SSLCertificateChainFile**

```
# Server Certificate Chain:
# Point SSLCertificateChainFile at a file containing the
# concatenation of PEM encoded CA certificates which form the
# certificate chain for the server certificate. Alternatively
# the referenced file can be the same as SSLCertificateFile
# when the CA certificates are directly appended to the server
# certificate for convinience.
SSLCertificateChainFile /etc/cert/1_root_bundle.crt
```

7. Save and exit.

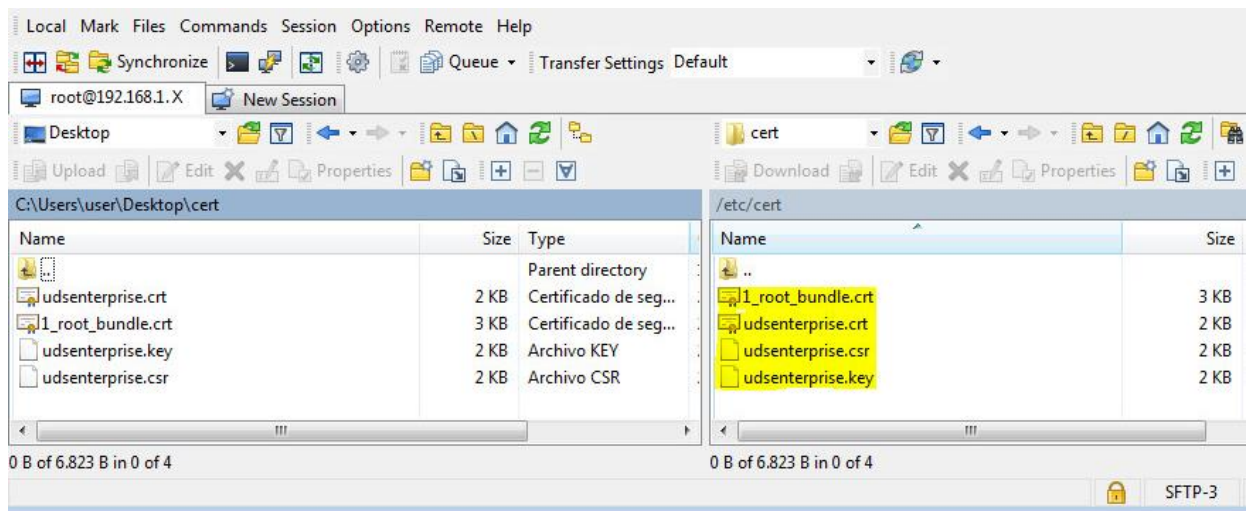
```
Save modified buffer (ANSWERING "No" WILL DESTROY CHANGES) ?
Y Yes
N No          ^C Cancel
```

8. Reboot UDS Server to apply changes



Steps to install certificates on UDS Tunneler:

1. Obtain the Certificates and upload them (for example with WinSCP) to the UDS Tunneler, in the following path: **/etc/cert** (it will be necessary to create the folder: cert)



2. Access UDS Tunneler console:

```
UDS Tunneler Enterprise 2.0.0
Hint: Num Lock on

UDSTunnel2 login: root
Password:
Last login: Tue Oct  4 12:24:29 CEST 2016 on tty1
Linux UDSTunnel2 3.16.0-4-amd64 #1 SMP Debian 3.16.7-ckt25-2+deb8u3 (2016-07-02) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
root@UDSTunnel2:~# _
```

3. Go inside the directory **/etc/tomcat8**

```
root@UDSTunnel2:~# cd /etc/tomcat8/
root@UDSTunnel2:/etc/tomcat8#
```

4. Edit the file **server.xml**

```
root@UDSTunnel2:~# nano /etc/tomcat8/server.xml_
```



5. Look for the line: **port="10443"** in the file, it will take you to the line to be edited.

```
-->
<Connector port="10443" protocol="org.apache.coyote.http11.Http11AprProtocol" SSLEnabled="true"
maxThreads="500" scheme="https" secure="true"
SSLCertificateFile="/usr/share/tomcat8/certs/server.certificate.pem"
SSLCertificateKeyFile="/usr/share/tomcat8/certs/server.key.pem"
maxKeepAliveRequests="1000"
clientAuth="false" sslProtocol="TLSv1+TLSv1.1+TLSv1.2" />
```

6. Edit the paths that point to the attributes "**SSLCertificateFile**" and "**SSLCertificateKeyFile**" of the certificates that you have uploaded to **/etc/cert**.

```
-->
<Connector port="10443" protocol="org.apache.coyote.http11.Http11AprProtocol" SSLEnabled="true"
maxThreads="500" scheme="https" secure="true"
SSLCertificateFile="/etc/cert/udsenterprise.crt"
SSLCertificateKeyFile="/etc/cert/udsenterprise.key"
maxKeepAliveRequests="1000"
clientAuth="false" sslProtocol="TLSv1+TLSv1.1+TLSv1.2" />
```

7. If you have a certificate from some certificate authority, you will have to add: **SSLCertificateChainFile** and specify the path of the certificate

```
<Connector port="10443" protocol="org.apache.coyote.http11.Http11AprPr
maxThreads="500" scheme="https" secure="true"
SSLCertificateFile="/etc/cert/udsenterprise.crt"
SSLCertificateKeyFile="/etc/cert/udsenterprise.key"
SSLCertificateChainFile="/etc/cert/1_root_bundle.crt"
maxKeepAliveRequests="1000"
clientAuth="false" sslProtocol="TLSv1+TLSv1.1+TLSv1.2" />
```

8. Save and exit.

```
Save modified buffer (ANSWERING "No" WILL DESTROY CHANGES) ?
Y Yes
N No      [Esc] Cancel
```

9. Reboot the UDS Tunneler to apply changes.



UDS Enterprise

Install SSL Certificates on UDS Enterprise 2.1

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In addition, VirtualCable offers professional services to install and configure UDS Enterprise and other virtualization technologies.

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